



NEWS RELEASE

Contact: Jamie Chandler
(617) 274-6600

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F.A.A. TO UTILIZE AVIATION SIMULATION TECHNOLOGY MODEL 300 SIMULATOR IN AVIATION RESEARCH PROJECTS

BEDFORD, MASS, Oct. 16 — The F.A.A. Technical Center, in contract with Embry-Riddle Aeronautical University is using an Aviation Simulation Technology, Inc., multiengine simulator in its Airmen Research program.

The Center, located outside of Atlantic City, New Jersey, is dedicated to the advancement of civil aviation safety and concentrates on test and evaluation projects in the areas of air traffic control, communications, navigation, approach and landing systems, and aircraft and airport safety. Projects currently underway include investigations of aircraft icing, advanced integrated flight systems, and airmen research.

The Aviation Simulation Technology simulator, equipped with computer-generated visual display and HSI, will be used in a multipurpose research project on pilot training. According to Doug Harvey, program manager for Airmen Research, the simulator was acquired for use in examining transfer effectiveness between simulator and airplane for initial multiengine training, and between instrument skills acquired in single engine versus multiengine aircraft.

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F.A.A. USING AVIATION SIMULATION UNIT —2

Thirty-two pilots will serve as subjects for the program. All are instrument rated with no multiengine class rating on their certificate, and little or no multiengine experience. Half of the test subjects will receive aircraft-only training, the other half a mix of aircraft and simulator training. Aviation Simulation Technology's multiengine training course, adapted to the Embry-Riddle curriculum and offering detailed lesson plans for the class rating, is being used in the program. The program will run from October 13 through December 15, 1981.

Subsequent research, Phase B, will study skills degradation over a period of time, beginning in January 1982.

The Aviation Simulation Technology simulator used in the study is a standard Model 300 multiengine unit. Similar machines are currently in use at Embry-Riddle Aeronautical University, a number of other universities, flight schools and simulator training operations in the United States, and numerous locations in Canada and Europe. The simulator offers a unique combination of aerodynamic and navigational fidelity which serve extremely well in this research application. The simulator's response in slow flight, stalls in various configurations, and engine out and Vmc characteristics make it ideal for multiengine transition training. Its capability to exactly duplicate all nav aids and airports in any area of the world on a changeable navigation PROM will permit instrument training using actual charts and approach plates in the same area where the subjects will complete their aircraft training.

Aviation Simulation Technology, Inc. manufactures microprocessor based single and multiengine flight simulators for general aviation.

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The fly-off, performed at the Daytona Beach campus, involved an intensive study of application of the units in the ERAU curriculum, aerodynamic performance, navigation capabilities, and reliability of the simulators in an operations environment. Aviation Simulation Technology's computer-generated visual display, unique in general aviation, was also installed for the evaluation. The visual display added to the realism provided by the simulator's real-world navigation capability. Students were able to navigate to and from their home field at Daytona Beach Regional Airport and throughout the Central Florida area. The visual display aided students in lining up and configuring the aircraft for approaches to the runways presented on the visual screen.

Installations will occur at both Daytona Beach where the multi-engine program is in effect and the Prescott campus where an Aviation Simulation Technology Model 300 has been in use for just over a year. This unit has accumulated 2500 hours of virtually maintenance-free operation, without a loss of scheduled training due to down time. This maintenance record, along with the flexibility to provide navigation PROMs for each of its training locations contributed to ERAU's major integrated purchasing decision.

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